

Amendments to the Abstract:

Please replace the abstract with the following amended abstract:

ABSTRACT

Methods and systems for interconnecting sub-systems and for identifying combinations of multiple technologies. The method of this invention can be applied to for detecting the presence of a characteristic in an object includes: providing three or more detection sub-systems; determining whether the characteristic is present in the object; subsequently determining whether the characteristic is present in the object; finally, determining, if previous determinations for a majority of the three or more detection sub-systems are not identical, whether the characteristic is present in the object; and, applying a predetermined criterion to detect the presence of the characteristic in the object.

When it is desired to select sub-systems for integration into a system for detecting the presence of one or more characteristics in an object, the method of this invention includes: providing a candidate system; performing a Monte Carlo analysis of detecting a presence of the at least one characteristic in an object; calculating a pre-defined figure of merit for the candidate system; selecting the candidate system if the figure of merit value satisfies a pre-determined criterion.

— Systems obtained by the above methods are also disclosed.